

CLAIMS

We claim:

1       1. A tool comprising:

2           a handle;

3           a shaft comprising a shaft axis connected to the handle;

4 and

5           an engaging portion comprising an engaging portion axis, a  
6 first end and a second end;

7           wherein the first end is connected to the shaft;

8           wherein the engaging portion comprises an opening extending  
9 from the first end to the second end thereby defining an axial  
10 inner surface of the engaging portion and an axial outer surface  
11 of the engaging portion;

12          wherein the opening comprises a first portion at the first  
13 end with a first opening area and a second portion at the second  
14 end with a second opening area;

15          wherein the first opening area has a different shape than  
16 the second opening area;

17          wherein the engaging portion comprises a slot extending  
18 from the axially inner surface to the axial outer surface; and

19          wherein the second end of the axial inner surface comprises  
20 a plurality of engaging surfaces.

1       2. The tool according to claim 1, wherein said shaft and  
2       said engaging portion are of one-piece construction.

1       3. The tool according to claim 1, wherein said shaft axis  
2       is offset from said engaging portion axis.

1       4. The tool according to claim 1, wherein said engaging  
2       portion and engaging surfaces are adapted to allow engagement  
3       with a standard sized connector.

1       5. The tool according to claim 1, wherein said first  
2       portion of said opening is adapted to fit a standard ratchet.

1       6. The tool according to claim 1, wherein said opening  
2       further comprises an inner portion of said axial inner surface  
3       located between said first portion and said engaging surfaces,  
4       the inner portion comprising a third opening area smaller than  
5       said second opening area.

1       7. The tool according to claim 6, wherein said inner  
2 portion comprises a seat for a connector whereby the connector  
3 is prevented from moving in the direction parallel to said  
4 engaging portion axis.

1       8. The tool according to claim 1, wherein said engaging  
2 portion comprises a plurality of points arranged in an arc about  
3 said engaging portion axis.

1       9. The tool according to claim 1, wherein the slot is  
2 adapted to accommodate a linear member attached to a connector.

1           10. A tool comprising:

2           a generally hollow cylindrical wrench of one-piece  
3 construction, having an axial inner surface, an axial outer  
4 surface, a first end, a second end, a center portion, a slot  
5 extending from the first end to the second end, and a  
6 longitudinal axis having a length extending from the first end  
7 to the second end;

8           a first engaging portion disposed on the axial inner  
9 surface of the first end of the tool, the first engaging portion  
10 further comprising a plurality of axial engaging surfaces  
11 adapted to cooperatively engage a multi-faceted connector;

12           a plurality of notches defined in the first end of the  
13 generally hollow cylindrical wrench, the notches extending from  
14 the axial inner surface to the axial outer surface; and

15           a second engaging portion disposed on the axial inner  
16 surface of the second end of the tool, the second engaging  
17 portion further comprising a plurality of tapered engaging  
18 surfaces, adapted for cooperatively engaging the tapered sides  
19 of a multi-faceted connector.

1       11. The tool according to claim 10, wherein the tool is of  
2 one-piece construction and about 7" long.

1       12. The tool according to claim 10, wherein said first and  
2 second engaging portions and engaging surfaces are adapted for  
3 engaging a standard sized connector.

1       13. The tool according to claim 10, wherein said first  
2 engaging portion and said second engaging portion each has five  
3 engaging surfaces approximately 3/4" long.

1       14. The tool according to claim 10, wherein said slot is  
2 adapted to accommodate a substantially linear water line sized  
3 for a sink or a lavatory.

1       15. The tool according to claim 10, wherein the tapered  
2 engaging surfaces has an opening approximately 15/16" at the  
3 second end of the tool, tapering to approximately 7/8".

1       16. The tool according to claim 10, wherein the axial  
2 outer surface of said center portion has a plurality of flat  
3 surfaces spaced radially around said axial outer surface, the  
4 flat surfaces being adapted to cooperatively engage a standard  
5 open-end wrench.